

# STRUCTURAL DESIGN TECHNICIAN II OPEN, NON-PROMOTIONAL SPOT FOR SACRAMENTO AND OAKLAND FINAL FILING DATE: FEBRUARY 27, 2009

OFFERING EQUAL EMPLOYMENT OPPORTUNITIES TO ALL REGARDLESS OF RACE, COLOR, CREED, NATIONAL ORIGIN, ANCESTRY, SEX, MARITAL STATUS, DISABILITY, RELIGIOUS OR POLITICAL AFFILIATION, AGE OR SEXUAL ORIENTATION.

OPEN,

NON-PROMOTIONAL SPOT FOR

HEADQUARTERS - SACRAMENTO DISTRICT 4 - OAKLAND

Candidates may only establish eligibility in <u>one</u> location. Indicate the location for which you are applying directly under the examination title on your application. Applications will be accepted on an open, non-promotional basis only.

**HOW TO APPLY** 

Applications (STD 678) must be **RECEIVED OR POSTMARKED** no later than the final filing date. **FAXED OR E-MAILED APPLICATIONS WILL NOT BE ACCEPTED.** Applications postmarked **AFTER THE FINAL FILING DATE**, personally delivered or received via interoffice mail **AFTER 5:00 P.M. ON THE FINAL FILING DATE WILL NOT BE ACCEPTED FOR ANY REASON. THE EXAMINATION TITLE <u>MUST</u> BE INDICATED ON THE APPLICATION.** 

FILE BY MAIL: Department of Transportation

Exam Services (MS 86)
P.O. Box 168036
Sacramento, CA 95816-8036

FILE IN PERSON: Department of Transportation 1727 30<sup>th</sup> Street, 1<sup>st</sup> Floor Sacramento, CA 95816 (916) 227-1821

SUBMIT APPLICATIONS ONLY TO THE ADDRESSES INDICATED ABOVE. DO <u>NOT</u> SEND APPLICATIONS TO THE STATE PERSONNEL BOARD OR DEPARTMENT OF TRANSPORTATION DISTRICT OFFICES. Applications may be obtained at the State Personnel Board in Sacramento, any Employment Development Department office, Department of Transportation district office, or at <a href="http://spb.ca.gov/jobs/stateapp.htm">www.dot.ca.gov/hq/jobs</a> on the Internet at <a href="http://spb.ca.gov/jobs/stateapp.htm">http://spb.ca.gov/jobs/stateapp.htm</a>.

REASONABLE ACCOMMODATION

If you have a disability and wish to participate in one of our testing services, programs, or activities and require a specific accommodation, please mark the appropriate box for Question #2 on the Examination and/or Employment Application form. You will be contacted to make specific arrangements. TDD users may contact the California Relay Service TDD line at 1-800-735-2929, Voice line at 1-800-735-2922.

**SALARY RANGE** 

\$3922 - \$4767

WRITTEN TEST DATE

The written test is scheduled for APRIL 18, 2009.

REQUIRED IDENTIFICATION

Accepted applicants are required to bring either a photo identification card or two forms of signed identification to each phase of the examination.

REQUIREMENTS FOR ADMITTANCE TO THE EXAMINATION

**NOTE:** All applicants must meet the education and/or experience requirements for this examination by the written test date. Your signature on your application indicates that you read, understand, and possess the minimum qualifications required.

NOTE: All applications/resumes must include: "to" and "from" dates (month/day/year), time base, civil service or private sector titles, and the duties performed. Applications/resumes received without this information will be rejected.

Qualifying experience may be combined on a proportionate basis if the requirements stated below include more than one pattern and are distinguished as "Either" I, "or" II "or" III, etc. For example, candidates possessing qualifying experience amounting to 50% of the required time of Pattern I, and additional experience amounting to 50% of the required time of Pattern II, may be admitted to an examination as meeting 100% of the overall experience requirements.

MINIMUM QUALIFICATIONS Either I

Two years of experience in the California state service performing the duties of a Structural Design Technician I.

Or I

Five years of structural drafting experience in an engineering office, two years of which shall have been experience equivalent in duties and level of responsibility to a Structural Design Technician I in the California state service. [College education in engineering or drafting may be substituted for a maximum of two years of the experience requirement on the basis of one year (30 semester units or equivalent quarter units) of education is equivalent to one year of experience.]

POSITION DESCRIPTION

This is the full journey level in the series. Under direction, incumbents prepare difficult or assist in the preparation of complex design, construction, and as-built drawings for a variety of structures from design notes and sketches; make related engineering calculations and plot data from field notes; do structural drafting work of above average difficulty, requiring skill, initiative, and accuracy; calculate vertical and horizontal alignment and related dimensions of structures for layout of above average difficulty; secure information in the field for the preparation of drawings to modify existing structures; check drafting work for accuracy of drafting and dimensioning; prepare quantity estimates; use state-of- the-art technology, i.e., CADD and related complex computer programs to determine layout, details, and geometric design of various types of structures; and act as a leadperson on less difficult projects in the preparation of plans, specifications, and estimates.

# SEE REVERSE SIDE FOR ADDITIONAL INFORMATION

It is an objective of the State of California to achieve a drug-free state work place. Any applicant for State employment will be expected to behave in accordance with this objective because the use of illegal drugs is inconsistent with the law of the State, the rules governing civil service, and the special trust placed in public servants.

STRUCTURAL DESIGN TECHNICIAN II

**BULLETIN RELEASE DATE: 02/04/09 LKS/LKS EXAM CODE: 9TR14** FINAL FILING DATE: FEBRUARY 27, 2009

# **EXAMINATION INFORMATION**

This examination will consist of a written test weighted 100%. In order to obtain a position on the eligible list, a minimum score of 70% must be attained. Section I will be comprised of CADD, and Section II will be comprised of mathematics and engineering calculations. Drafting Methods. Calculators will not be allowed in this examination.

# **WRITTEN TEST - WEIGHTED 100%**

### Scope:

This series specification describes classes which perform skilled structural drafting and design work in State service.

# A. Knowledge of:

- 1. Details, methods, and layouts used in the preparation of structural design and construction drawings for a variety of structures.
- 2. Engineering mathematics.
- 3. Quantity estimates.
- 4. State-of-the-art technology, i.e., CADD and related computer programs used to determine layout, detail drawings, and create geometric design for various types of structures.
- 5. Layout and details of steel, concrete, masonry, and timber structures.
- 6. The preparation and checking of structural design plans, construction drawings, quantity estimates, and as-built drawings.
- 7. Make engineering calculations.
- 8. Codes and specifications governing structural design and construction.

# B. Ability to:

- 1. Communicate at a level required for successful job performance.
- Follow written and oral directions.
- 3. Do mechanical and free-hand lettering.
- Draft neat, accurate, and legible plans of average difficulty.
- Interpret sketches, drawings, and plans encountered in the work.
- Prepare and check quantity estimates.
- Use state-of-the art technology, i.e., CADD and related computer programs.
- Assist in performing geometric design of average difficulty.
- Make basic engineering calculations.
- 10. Plot data from field notes.
- Prepare graphs and charts. 11.
- 12. Work independently.
- 13. Complete difficult structural drafting assignments.
- 14. Do difficult layout work, calculations, and structural detail drafting.
- 15. Act in a leadperson capacity on less difficult projects.

# **ELIGIBLE LIST** INFORMATION

An open, non-promotional spot eligible list will be established for the Department of Transportation in Headquarters - Sacramento and District 4 - Oakland. The list will be abolished 12 months after it is established unless the needs of the service and conditions of the list warrant a change in this period.

# **CAREER CREDITS**

Career credits will be added to the final score of all competitors who are successful in this examination and who qualify for these credits. IF YOU RECEIVE VETERANS PREFERENCE POINTS, YOU CANNOT ALSO RECEIVE CAREER CREDITS.

# VETERANS PREFERENCE POINTS

Veterans preference points will be added to the final score of all competitors who are successful in this examination and who qualify for, and have applied for, these points. Due to changes in the law, which were effective January 1, 1996, VETERANS WHO HAVE ACHIEVED PERMANENT CIVIL SERVICE STATUS ARE NOT ELIGIBLE TO RECEIVE VETERANS PREFERENCE POINTS.

# GENERAL INFORMATION

It is the candidate's responsibility to contact the Caltrans Office of Examination Services in Sacramento, three business days prior to the written test date if he/she has not received his/her notice.

For an examination without a written feature, it is the candidate's responsibility to contact the Caltrans Office of Examination Services in Sacramento at (916) 227-1821, three weeks after the final filing

If a candidate's notice of oral interview or performance test fails to reach him/her prior to the day of the interview due to a verified postal error, he/she will be rescheduled upon written request

Applications are available at the State Personnel Board in Sacramento, any Employment Development Department office, Department of Transportation district office or at www.dot.ca.gov/hq/jobs on the Internet.

If you meet the requirements, you may take this examination. Possession of the entrance requirement does not assure a place on the eligible list. All candidates who pass will be ranked according to The Department of Transportation reserves the right to revise the examination plan to better meet the needs of the service if the circumstances under which this examination was planned change. Such

revision will be in accordance with civil service laws and rules and all candidates will be notified.

Examination Locations: When a written test is part of the examination, it will be given in such places in California as the number of candidates and conditions warrant. Locations of interviews may be limited or extended as conditions warrant. Eligible Lists: Eligible lists established by competitive examination, regardless of date, must be used in the following order: 1) subdivisional promotional, 2) departmental promotional, 3) multidepartmental promotional, 4) servicewide promotional, 5) departmental open, 6) open. When there are two lists of the same kind, the older must be used first. Eligible lists will expire in one to four

years unless otherwise stated on this bulletin.

General Qualifications: Candidates must possess essential personal qualifications including integrity, initiative, dependability, good judgment and ability to work cooperatively with others; and a state of health consistent with the ability to perform the assigned duties of the class. A medical examination may be required. In open examinations, investigation may be made of employment records and personal history, and fingerprinting may be required.

Career Credits: In open, non-promotional examinations, career credits are granted to: 1) state employees with permanent civil service status; 2) full-time employees of the State who are exempt from State civil service pursuant to the provisions of Section 4 of Article VII of the California Constitution, and who meet all qualification requirements specified by the Board and have 12 consecutive months of service in an exempt position, and 3) individuals who have served one full year in, or are graduates of the California Conservation Corps (eligibility shall expire 24 months after graduation from the California Conservation Corps). Three points are added to the final test score of those candidates who meet the above criteria, and who are successful in the examination. Such examinations cannot be for managerial positions described in Government Code Section 3513. Competitors not currently employed in State civil service who have mandatory reinstatement rights may also be eligible for career credits, but they must explain their civil service status in the appropriate section of the application form 100-678. (Section 4 of Article VII of the California Constitution is posted at the State Personnel Board, 801 Capitol Mall, Sacramento, CA.)

Veterans Preference: California law allows granting of Veterans Preference points in open entrance examinations and open, non-promotional exams. Credit in open entrance examinations is granted as follows: 10 points for veterans, widows and widowers of veterans, and spouses of 100%-disabled veterans; and 15 points for disabled veterans. Credit in open, non-promotional examinations is granted as follows: 5 points for veterans; and 10 points for disabled veterans. Directions for applying for veterans preference points are on the veterans preference application (Form 1093) which is available from the State Personnel Board, written test proctors, and the Department of Veterans Affairs, P.O. Box 942895, Sacramento, CA 94295-0001.

High School Equivalence: Equivalence to completion of the 12th grade may be demonstrated in any one of the following ways: 1) passing the General Educational Development (GED) Test; 2) completion of 12 semester units of college-level work; 3) certification from the State Department of Education, a local school board, or high school authorities that the candidate is considered to have education equivalent to graduation from high school; or 4) for clerical and accounting classes, substitution of business college work in place of high school on a year-for-year basis.

For individuals with disabilities, this document may be available upon request in alternate formats. To obtain an alternate format, please call or write to the California Department of Transportation, Office of Examinations and Recruitment Services, P.O. Box 168036, MS 86, Sacramento, CA 95816. Voice (916) 227-7858 California Relay Service: Voice 1-800-735-2922 or TTY 1-800-734-2929.

RECORDED JOB LINE: 1-800-995-6748 **OPEN AND PROMOTIONAL EXAMS:** (916) 227-7856